

Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claims 1-26 (Cancelled)

27. (New) A medical catheter, which comprises:

an elongated body adapted for insertion within a blood vessel, the elongated body including an outer wall defining a longitudinal axis and having leading and trailing end portions, and with at least one longitudinal lumen within the outer wall for passage of fluid, the leading end portion including an outer wall portion defining a peripheral arc segment and with a fluid port in fluid communication with the at least one longitudinal lumen, the peripheral arc segment defining opposed ridges, the ridges generally extending along the longitudinal axis, each ridge having an outer ridge surface dimensioned and positioned to engage interior wall portions of the blood vessel in supporting relation therewith to substantially minimize collapse of the vessel and occlusion of the fluid port, the outer ridge surface of at least one of the ridges defining a plurality of lateral channels therein, the lateral channels being longitudinally spaced relative to the longitudinal axis of the elongated body.

28. (New) The medical catheter according to claim 27 wherein the peripheral arc segment is dimensioned to subtend an angle greater than about 180 degrees.

29. (New) The medical catheter according to claim 27 wherein each of the outer ridge surfaces includes lateral channels.

30. (New) The medical catheter according to claim 29 wherein the elongated body includes first and second longitudinal lumens and respective fluid ports in fluid communication with the first and second longitudinal lumens to permit passage of fluid.

31. (New) The medical catheter according to claim 30 wherein the fluid ports of the first and second longitudinal lumens are arranged in longitudinal spaced relation with respect to the longitudinal axis.

32. (New) The medical catheter according to claim 30 wherein the elongated body includes an inner septum wall.

33. (New) The medical catheter according to claim 32 wherein the outer ridges surfaces are each substantially planar, the lateral channels forming concavities within the outer ridge surfaces.

34. (New) The medical catheter according to claim 33 wherein the outer ridges surfaces are each arranged in oblique relation with respect to the inner septum wall.

35. (New) The medical catheter according to claim 27 wherein the elongated body includes three longitudinal lumens.

36. (New) The medical catheter according to claim 27 wherein the elongated body includes a port wall adjacent the fluid port, the port wall defining a general helical arrangement with respect to the longitudinal axis.

37. (New) The medical catheter according to claim 27 wherein the trailing end portion of the outer wall of the elongated body is substantially circular.

38. (New) The medical catheter according to claim 27 wherein the trailing end portion of the outer wall of the elongated body is substantially elliptical.

39. (New) A medical catheter, which comprises:
an elongated body adapted for insertion within a blood vessel of a subject, the elongated body including an outer wall defining a longitudinal axis and having proximal and distal ends, the elongated body having a first longitudinal lumen and associated fluid port for removal of blood from the subject and a second longitudinal lumen and associated fluid port for return of blood to the subject, the outer wall having an outer wall portion adjacent the distal end of the elongated body, the outer wall portion defining a peripheral arc segment subtending an angle greater than about 180 degrees to define opposed standoff ridges generally extending along the longitudinal axis, each ridge having an outer ridge surface dimensioned and positioned to engage interior wall portions

of the blood vessel in supporting relation therewith to substantially minimize collapse of the vessel and occlusion of the fluid port, the outer ridge surfaces each defining a plurality of lateral channels therein, the lateral channels being longitudinally spaced relative to the longitudinal axis of the elongated body.

40. (New) The medical catheter according to claim 39 wherein the fluid port associated with the second longitudinal lumen is distal of the fluid port associated with the first longitudinal lumen.

Amendments to the Drawings

The attached sheet of drawings includes changes to FIG. 2. This sheet, which includes FIG. 2, replaces the original sheet including FIG. 2. In FIG. 2, the arc segment “p” and subtending angle “A” are clarified.

Attachment: Replacement Sheet

Annotated Sheet showing changes